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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/807,254      | 07/09/2001  | Sadik Tuzun          | 1193-PCTUS00        | 4185             |

7590 11/02/2005  
CARTER DELUCA FARRRELL & SCHMIDT LLP  
446 BROAD HOLLOW ROAD  
SUITE 225  
MELVILLE, NY 11747

EXAMINER

PRYOR, ALTON NATHANIEL

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

1616

DATE MAILED: 11/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/807,254

Applicant(s)

TUZUN ET AL.

Examiner

Alton N. Pryor

Art Unit

1616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on 08 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☐ Claim(s) 24-39, 42, 44-47, 70-76, 78-86, 91, 96-99 and 117 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 24-34, 36-39, 42, 44-47, 70, 71, 73-76, 78-86, 91, 96-99 and 117 is/are rejected.
- 7) ☐ Claim(s) 35, 48 and 72 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

I. Rejection claims under 35 USC 103(a) as being obvious over Sangwan et al will not be maintained. Sangwan does not teach the instant method wherein the essential oil is applied to plants.

II. Applicant's arguments, see paper, filed 8/8/05, with respect to the rejection(s) of claim(s) under 35 USC 103(a) have been fully considered and are persuasive.

Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of see rejection below.

#### ***Claim Rejections - 35 USC § 112***

Claims 83-85 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification does not provide a description as to how a composition formulated as a paraffin or paint is applied to soil.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 24-34,36-39,42,44-47,70,71,73-76,78-82,86,91,96-99,117 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sumitomo et al (JP 6-65014;

Art Unit: 1616

3/8/94). Sumitomo teaches a method of protecting turfgrass (plant foliage) from pathogenic microorganisms comprising applying to the turfgrass 40 or 50 ppm thyme oil (essential oil). See abstract, claim 1, paragraphs 1,5-8. Sumitomo teaches that the essential oil can make up 5-80% of the composition and is derived from *Taymus vulgaris* L (*Thymbra spicata* var. *spicata*). See paragraph 7. Sumitomo teaches that the essential oil has outstanding antimicrobial activity against a wide range of turfgrass pathogens. See paragraphs 8,10. Sumitomo also teaches that the composition can comprise water. Practical Example is to a composition comprising 64% water. See paragraph 12. Sumitomo does not teach the method comprising anethole. However, JP 05139924 discloses a method of applying anethole to plants for protection from pathogen diseases. It would have been obvious to one having ordinary skill in the art to modify the invention of Sumitomo to include the plant oil (vegetable oil) anethole taught by JP '924. One would have been motivated to do this since both references are directed to controlling pathogens on plants. Sumitomo does not teach an oil in water emulsion. Sumitomo does not disclose a method wherein application of the essential oil is applied to soil and as a result kills insects (flies, fleas, ticks, etc.). Sumitomo does not teach instant method wherein 1 to 1000 ppm essential oil is applied to the soil. It would have been obvious to one having ordinary skill in the art to make an oil in water emulsion and apply it to turfgrass. One would have been motivated to do this since Sumitomo teaches an oil in water emulsion wherein the essential oil can make up as low as 5% of the composition and wherein the water component can make up 42% of the composition. This combination of water and oil can yield an oil in water emulsion. It

Art Unit: 1616

would have been obvious that the composition when applied to turfgrass would have reached the soil and therefore the composition would have controlled microorganisms as well as insects. In the absence of unexpected results, the type of formulation or preparation (dust, granule, cream, etc.) is non-patentable. With respect to delivery of the method of delivering the pesticidal compositions, the art is established in delivery applications such as fogging, water irrigation, and spraying.

Claims 24,25,33-36,42-45,47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brinker et al (US 6020287; 2/1/00). Brinker teaches a method of protecting plants from pathogenic microorganism comprising applying to the foliage of the plant a composition comprising an exogenous chemical (pesticide) plus cinnamaldehyde (essential oil). See abstract, column 1 lines 21-37, column 3 lines 6-10, column 6 line 40 – column 7 line 34, column 9 line 12 – column 10 line 36. Brinker teaches the composition can exist an oil in water emulsion. See column 14 line 27, column 16 lines 38-49. The compositions can exist in the form of powders, granules or as a spray. Brinker does not teach instant method wherein 1 to 1000 ppm essential oil is applied to the soil. With respect to the amount of essential oil, it would have been obvious to determine the amount of essential oil for instant method. One would have been motivated to do this in order to develop an effective method for controlling pests (pathogens, insects). In the absence of unexpected results, the type of formulation or preparation is non-patentable.

Art Unit: 1616

***Claim Objection***

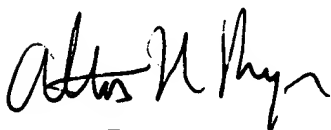
Claims 35,48,72 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The prior art does not teach or suggest instant method comprising bacteria which degrades essential oils and the instant Thymbra Line species.

***Telephonic Inquiry***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alton N. Pryor whose telephone number is 571-272-0621. The examiner can normally be reached on 8:00 a.m. - 4:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Kunz can be reached on 571-272-0887. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Alton Pryor

Application/Control Number: 09/807,254

Page 6

Art Unit: 1616

Primary Examiner

AU 1616